

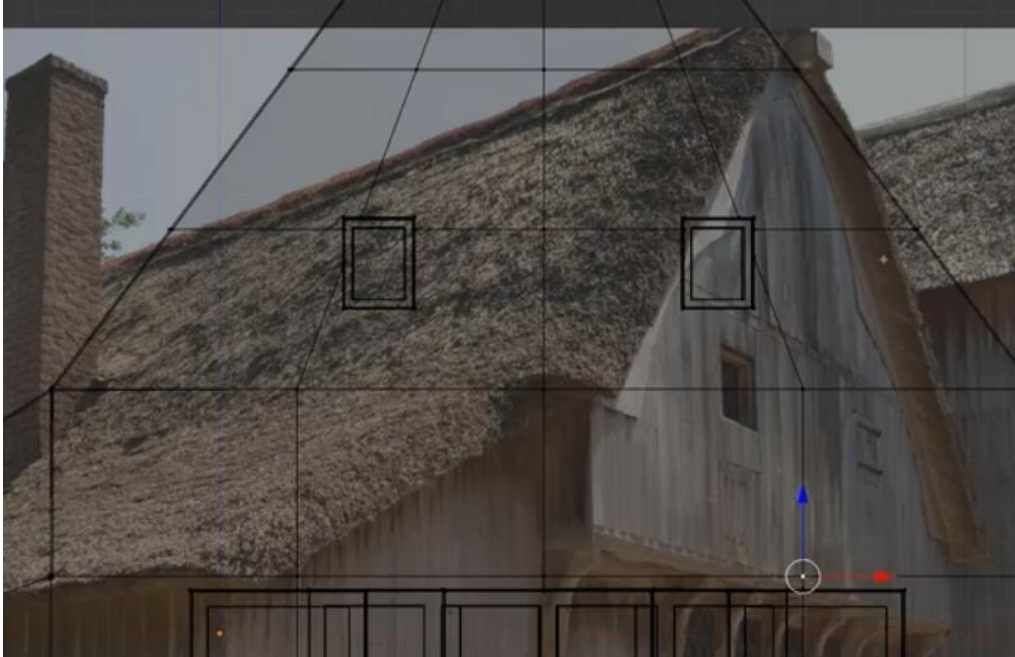
Chapter 4, lesson 46, extending the roof

In this lecture we look at how we continue to shape the roof according to the reference image.

- We extend the roof
- Discuss the importance of making small adjustments to straight edges.

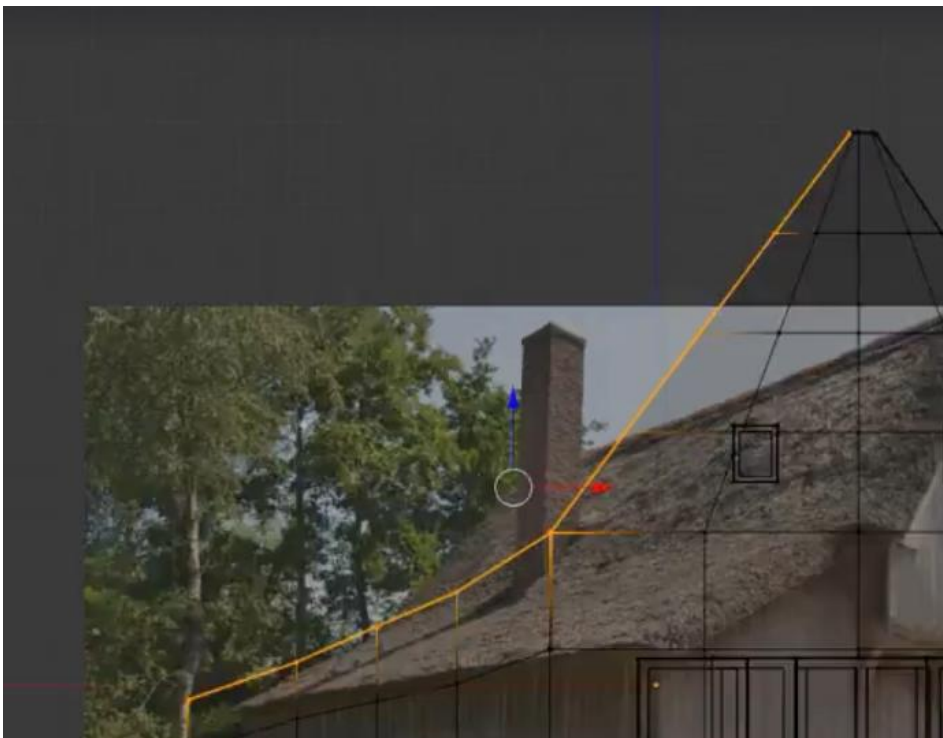
Chapter 4, lesson 46, extending the roof

To start off we look at the reference. As you can see the roof is a little bit extruded and goes over the front of the building. We will need to add some thickness to the roof and extrude this part.

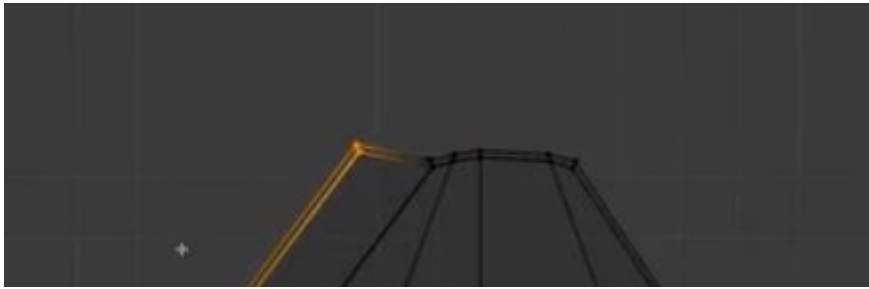


While moving around in the viewport we discover a small error at the rooftop. Problems like these are quite common and when we become aware of them we just deal with them. There are all kinds of problems that can occur when we work and depending on the situation the solution may be more or less obvious. When troubleshooting we will have to use our previous knowledge to deal with this. In this case it is an easy fix and we can move these vertices back manually.

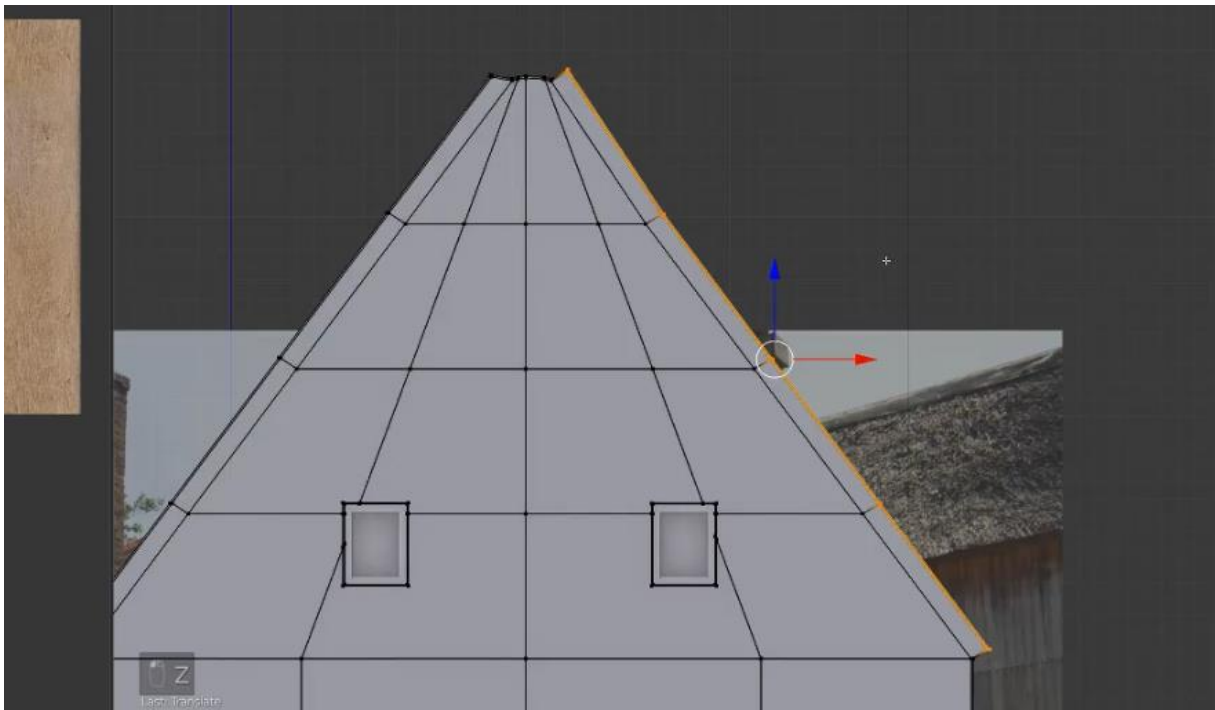
Let us continue. We can use box or circle select to select the roof. Start by selecting the left side and hit “E” to extrude it slightly. For now, don’t extrude the top of the building.



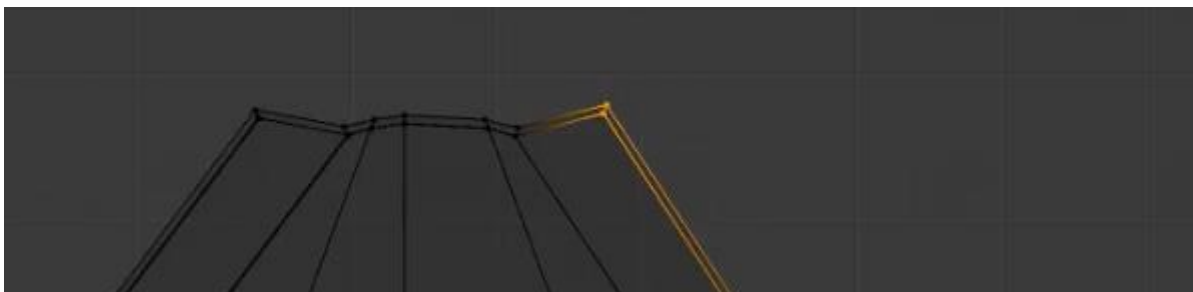
Now we will adjust a few vertices. Drag down the extruded vertices at the top of the roof.



Now select the other side and extrude it as well.



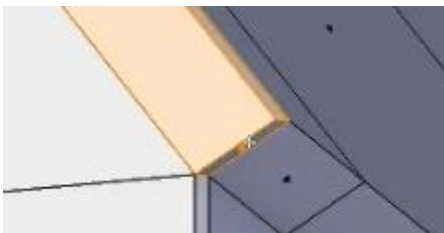
Adjust the top on this side as well to match the first side. Also, don't forget to adjust the bottom of the left side of the roof.



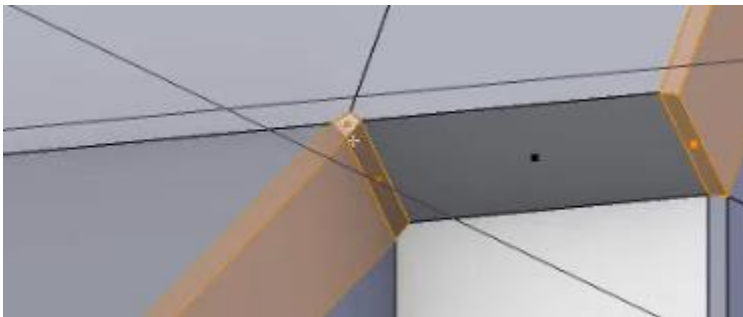
By extruding the roof, we have created extra geometry on the top of the walls. The next step is to extrude this part to make the part of the roof that is overhanging over the walls. Continue by selecting these parts. If you have made bevels here make sure that you select the bevel as well. Only select the faces that can be extruded in the X direction. An example of a face that we don't need to select is this one.



Select all the faces that we need to extrude at the same time so that we get the same depth on this whole side of the roof. On the far-right side don't forget to deselect this last beveled edge.

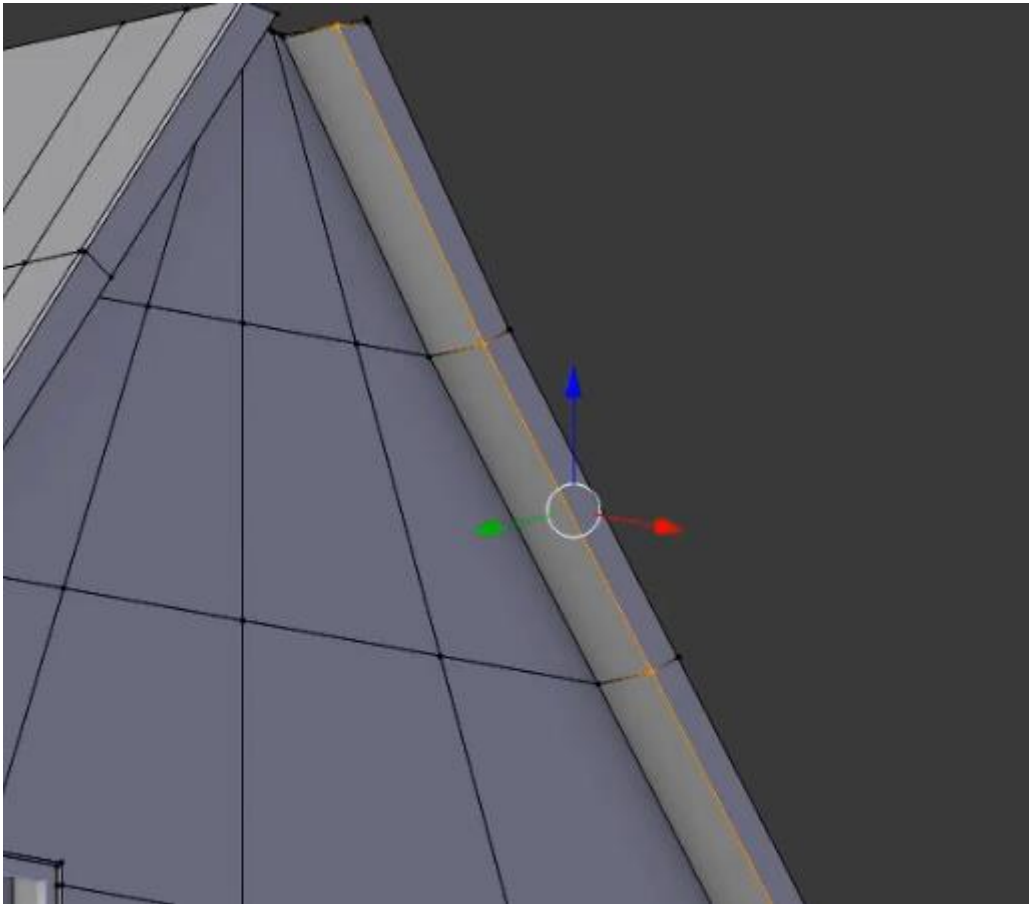


Select the bevel in this corner between the lower and higher part of the roof.

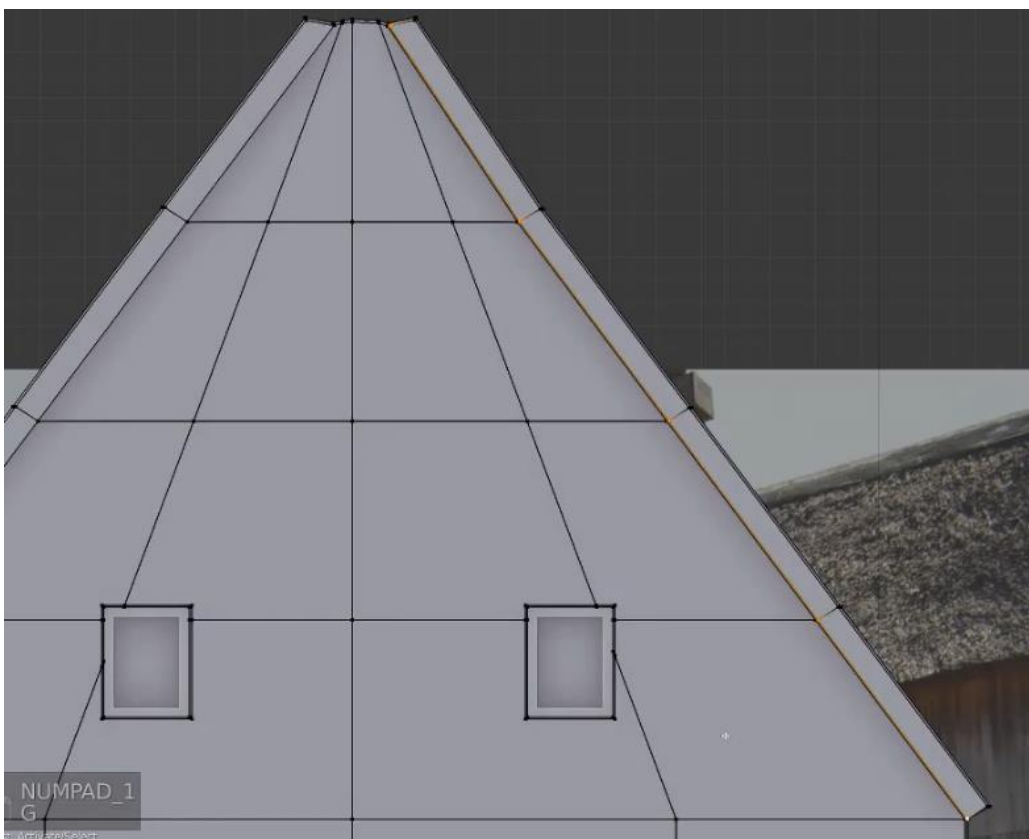


Extrude the roof slightly. Rotate the view and adjust the extrusion in the X direction if you went too far or too shallow.

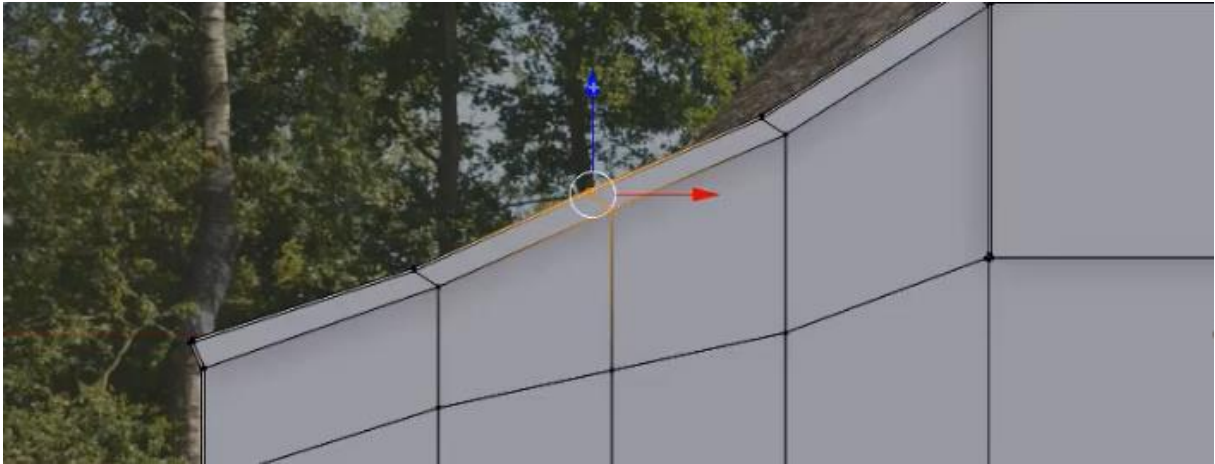
When you are happy with the depth we will go back and select the lower edge of the newly extruded part of the roof. We will bring this in slightly to adjust the angle of the faces that are facing the X direction.



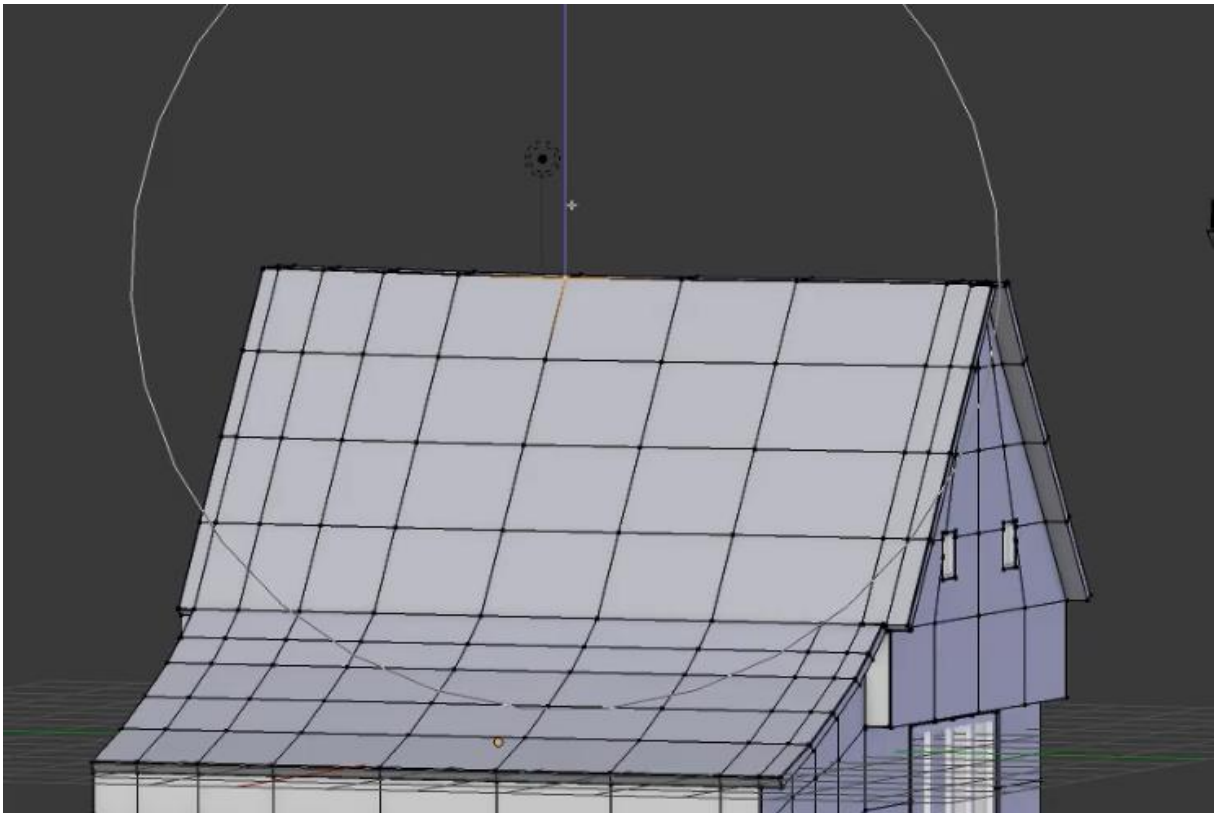
Go to front view and hit “G” to bring it towards the upper edge slightly. Do the same on both sides.



When looking at the building at this point it is apparent that the roof on the lower part of the building does not have a nice curve to it. The line from front view misses a nice curve to it so it is adjusted.

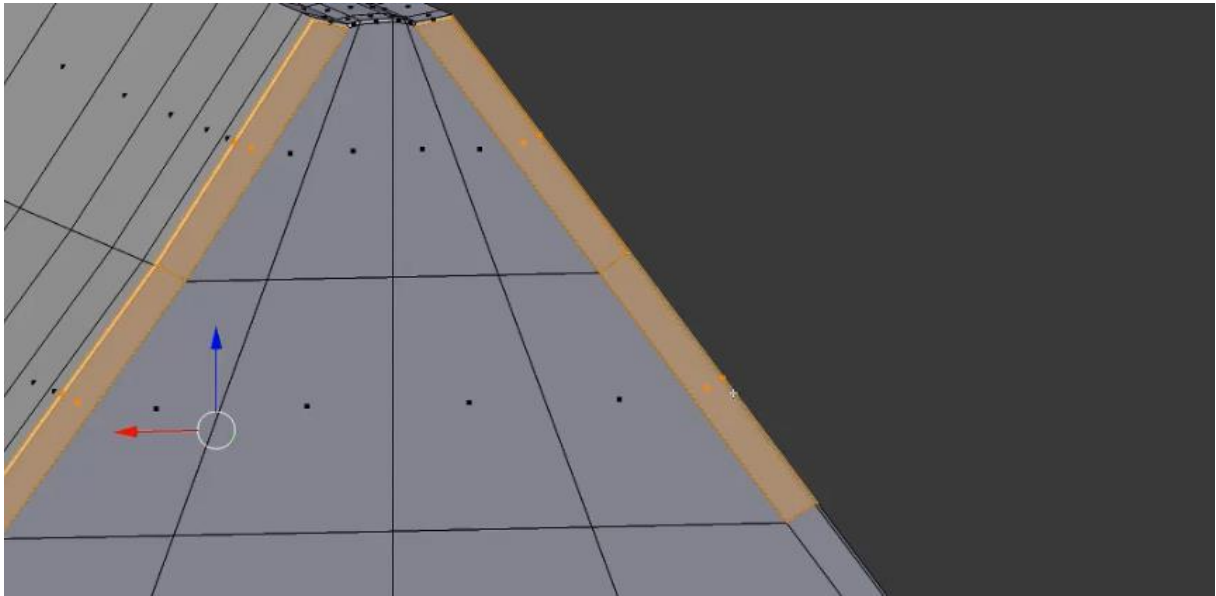


Now we will spend some time to adjust the shape of the building a bit more. Press “O” to turn on proportional editing. Select a vertex in the top of the building base and hit “G” to grab it. Scroll the mouse wheel so that the circle indicating the influence of proportional editing becomes quite large and cover a large part of the building then adjust the position slightly to add some life.

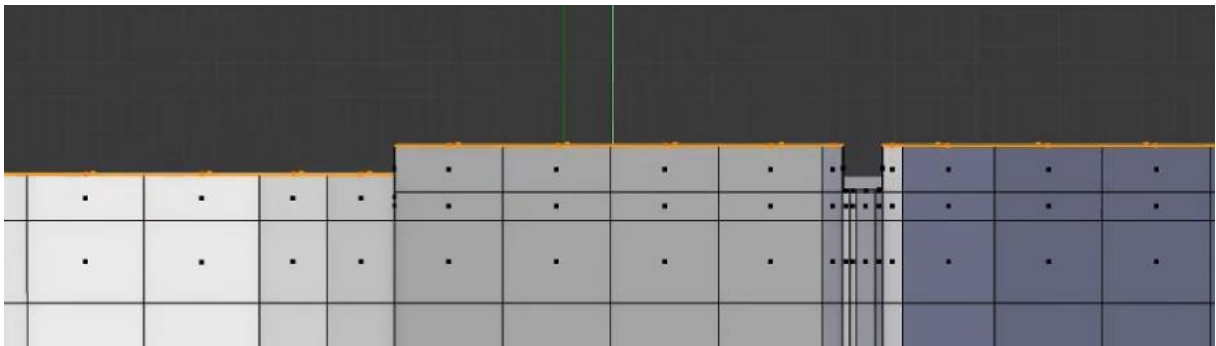


For instance, push the roof down slightly to create a small illusion that the building has curved in a bit thanks to the weight of the roof and a slight lack of support for the roof. Go around and curve some more key areas on the building like the newly extruded roof, the side of the roof on the lower part of the building etc. The corners of the walls are another good place to make a slight adjustment. The very straight edges will make your building come off as fake and in the details, we can prevent this. Spent time on each part of the building for a better result.

When this is done we can go to the back of the building and repeat the process of extruding the roof as we did in the front. Select the top part and don't forget the bevel.



When the side is selected go to top view and extrude.



Adjust the depth to your liking and go back in and select the lower edge and adjust it up slightly. This is the end of this lecture.